

Abstract

Title: 3D analysis of immediate effect on posture of shoe with postural insoles based on Rašev and with proceptor insoles PodoAktiv®

Objective: The aim of this study is to evaluate the immediate effect of shoe insoles with postural pelote by Rašev and shoe insoles with proceptors PodoAktiv® on the postural hold with main focus at the pelvis and shoulder.

Methodology: In this thesis we examined 9 participants who agreed joining the study. To measure postural hold body segments which we have chosen, we have used the Balance®4D device. The selected body segments were marked by white spheric stickers. To compare postural hold of selected body segments we examined the participants in altogether 4 situations. Barefoot stand, stand in shoes without insoles, stand in shoes with custom-made postural insoles based on Rašev and stand in shoes with custom-made insoles PodoAktiv®.

Results: In this study we confirmed that postural insoles based on Rašev have immediate effect on the hold of pelvis and shoulders. The insoles PodoAktiv® don't show such an effect on the hold of those segments we have tested. The hypothesis H1 and H2 have been confirmed, hypothesis H3 and H4 have been rejected. There was not found any trend which would describe the immediate reaction of the participants (postural hold with main focus at the pelvis and shoulder) after application two different kinds of shoe custom-made insoles.

Keywords: Custom made shoe insoles, proprioceptors, pelvis, shoulder, postural hold, static kinematic analysis